```
=> file .Biotech
=> s (neurotrophin or NT or NT-4/5 or NT-3 or Nerve Growth Factor or NGF)
L1       167941 (NEUROTROPHIN OR NT OR NT-4/5 OR NT-3 OR NERVE GROWTH FACTOR OR
                NGF)

=> s l1 and (isolat? or purif? or prepar?)
L2        51215 L1 AND (ISOLAT? OR PURIF? OR PREPAR?)

=> s l2 and (misfold variant or glycosylated variant or proteolytic variant or
chemical variant)
L3           16 L2 AND (MISFOLD VARIANT OR GLYCOSYLATED VARIANT OR PROTEOLYTIC
                VARIANT OR CHEMICAL VARIANT)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4            15 DUP REM L3 (1 DUPLICATE REMOVED)

=> d l4 1-15 bib ab

L4   ANSWER 1 OF 15  USPATFULL on STN
AN     2004:171940  USPATFULL
TI     Optimized Fc variants and methods for their generation
IN     Lazar, Gregory Alan, Alhambra, CA, UNITED STATES
       Chirino, Arthur J., Camarillo, CA, UNITED STATES
       Dang, Wei, Pasadena, CA, UNITED STATES
       Desjarlais, John Rudolph, Pasadena, CA, UNITED STATES
       Doberstein, Stephen Kohl, Pasadena, CA, UNITED STATES
       Hayes, Robert J., Pasadena, CA, UNITED STATES
       Karki, Sher Bahadur, Pasadena, CA, UNITED STATES
       Vafa, Omid, Monrovia, CA, UNITED STATES
PA     Xencor (U.S. corporation)
PI     US 2004132101      A1   20040708
AI     US 2003-672280     A1   20030926 (10)
PRAI   US 2003-477839P     20030612 (60)
       US 2003-467606P     20030502 (60)
       US 2002-414433P     20020927 (60)
       US 2003-442301P     20030123 (60)
DT     Utility
FS     APPLICATION
LREP   Robin M. Silva, Esq., Dorsey & Whitney LLP, Intellectual Property
       Department, Four Embarcadero Center, Suite 3400, San Francisco, CA,
       94111-4187
CLMN   Number of Claims: 67
ECL    Exemplary Claim: 1
DRWN   36 Drawing Page(s)
LN.CNT 7318
AB     The present invention relates to optimized Fc variants, methods for
       their generation, and antibodies and Fc fusions comprising optimized Fc
       variants.

L4   ANSWER 2 OF 15  USPATFULL on STN
AN     2004:20697  USPATFULL
TI     Production of butyrylcholinesterases in transgenic mammals
IN     Karatzas, Costas N., Quebec, CANADA
       Huang, Yue-Jin, Quebec, CANADA
       Lazaris, Anthoula, Quebec, CANADA
PI     US 2004016005      A1   20040122
AI     US 2002-326892     A1   20021220 (10)
PRAI   US 2001-344295P     20011221 (60)
DT     Utility
FS     APPLICATION
LREP   DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257
CLMN   Number of Claims: 62
ECL    Exemplary Claim: 1
DRWN   13 Drawing Page(s)
```

LN.CNT 3540
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods for the large-scale production of recombinant butyrylcholinesterase in cell culture, and in the milk and/or urine of transgenic mammals. The recombinant butyrylcholinesterases of this invention can be used to treat and/or prevent organophosphate pesticide poisoning, nerve gas poisoning, cocaine intoxication, and succinylcholine-induced apnea.

L4 ANSWER 3 OF 15 USPATFULL on STN
AN 2003:288282 USPATFULL
TI Controlled release microencapsulated **NGF** formulation
IN Cleland, Jeffrey L., San Carlos, CA, UNITED STATES
Lam, Xanthe M., San Francisco, CA, UNITED STATES
Duenas, Eileen T., San Jose, CA, UNITED STATES
PI US 2003203040 A1 20031030
AI US 2003-442894 A1 20030520 (10)
RLI Continuation of Ser. No. US 1998-95911, filed on 11 Jun 1998, PENDING
PRAI US 1997-49541P 19970613 (60)
DT Utility
FS APPLICATION
LREP HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 1931
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **NGF** microencapsulation compositions having controlled release characteristics, preferably with increased stability, for the **NGF** component, particularly human recombinant **NGF** ("rhNGF") are provided that yield enhanced stability of **NGF** for use in promoting nerve cell growth, repair, survival, differentiation, maturation or function. Methods for making and using such compositions are also provided.

L4 ANSWER 4 OF 15 USPATFULL on STN
AN 2003:187869 USPATFULL
TI Library screening
IN Whelihan, E. Fayelle, South Boston, MA, UNITED STATES
Ladner, Robert C., Ijamsville, MD, UNITED STATES
PI US 2003129659 A1 20030710
AI US 2002-309391 A1 20021203 (10)
PRAI US 2001-337482P 20011203 (60)
US 2001-336672P 20011205 (60)
DT Utility
FS APPLICATION
LREP FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110
CLMN Number of Claims: 54
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 3430
AB Systems, methods, and apparati for screening libraries, particularly display libraries are disclosed. Methods can be automated or at least partially machine-based. Also disclosed are software and databases that interface with a library screening process such as a display library screening process. A computer system can be used to store, manage, and generate information that includes assay results and sample tracking from various automation stations. The system can include interfaces for project management, data analysis, and sample tracking and auditing. A database can manage hits identified during screening of a library. The database can be a relational database that includes tables for projects, libraries, screens, and hits.

L4 ANSWER 5 OF 15 USPATFULL on STN

AN 2003:127014 USPATFULL
TI HUMAN DNA MISMATCH REPAIR PROTEIN
IN HASELTINE, WILLIAM A., WASHINGTON, DC, UNITED STATES
RUBEN, STEVEN, OLNEY, MD, UNITED STATES
WEI, YING-FEI, DARNESTOWN, MD, UNITED STATES
ADAMS, MARK D., NORTH POTOMAC, MD, UNITED STATES
FLEISCHMANN, ROBERT D., WASHINGTON, DC, UNITED STATES
FRASER, CLAIRE M., QUEENSTOWN, MD, UNITED STATES
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES
FULDNER, REBECCA A., BARNESVILLE, MD, UNITED STATES
KIRKNESS, EWEN F., WASHINGTON, DC, UNITED STATES
PI US 2003087226 A1 20030508
US 6620619 B2 20030916
AI US 1994-210143 A1 19940316 (8)
RLI Continuation-in-part of Ser. No. US 1994-187757, filed on 27 Jan 1994, GRANTED, Pat. No. US 6482606
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention discloses three human DNA repair proteins and DNA (RNA) encoding such proteins. The DNA repair proteins may be produced by recombinant DNA techniques. One of the human DNA repair proteins, hmlh1, has been mapped on chromosome 3. The polynucleotide sequences of DNA repair proteins may be used for diagnosis of a hereditary susceptibility to cancer.

L4 ANSWER 6 OF 15 USPATFULL on STN
AN 2002:265899 USPATFULL
TI Novel semaphorin genes (I)
IN Inagaki, Shinobu, Ibaraki-shi, JAPAN
Furuyama, Tatsuo, Ibaraka-shi, JAPAN
PA Sumitomo Pharmaceuticals Company, Limited (non-U.S. corporation)
PI US 2002146775 A1 20021010
AI US 2002-144031 A1 20020514 (10)
RLI Division of Ser. No. US 1999-308179, filed on 14 May 1999, PENDING A 371 of International Ser. No. WO 1997-JP4111, filed on 12 Nov 1997, UNKNOWN
PRAI JP 1996-321068 19961115
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 1218
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a novel Semaphorin having neurite-outgrowth inhibition activity or proteins analogous thereto, peptide fragments of, or antibodies against, such proteins, genes encoding such proteins, expression vectors for said genes, transformed cells into which said expression vectors have been introduced, methods for producing a recombinant protein which employ said transformed cells, antisense nucleotides against the above genes, transgenic animals involving insertion or deletion of the above genes, and screening methods for antagonists of the above proteins, all of which are useful mainly in diagnoses, treatments, or studies relating to neurological diseases. The present invention further provides use of such proteins, peptides, antibodies, genes, or antisense nucleotides as pharmaceutical or diagnostic agents or laboratory reagents.

L4 ANSWER 7 OF 15 USPATFULL on STN

AN 2002:251935 USPATFULL
TI **Purification** of **NGF**
IN Burton, Louis E., San Mateo, CA, UNITED STATES
Schmelzer, Charles H., Burlingame, CA, UNITED STATES
Beck, Joanne T., Westlake Village, CA, UNITED STATES
PI US 2002137893 A1 20020926
AI US 2002-72681 A1 20020208 (10)
RLI Continuation of Ser. No. US 2000-675503, filed on 29 Sep 2000, GRANTED, Pat. No. US 6423831 Continuation of Ser. No. US 1999-363573, filed on 29 Jul 1999, GRANTED, Pat. No. US 6184360 Continuation of Ser. No. US 1997-970865, filed on 14 Nov 1997, GRANTED, Pat. No. US 6005081
PRAI US 1996-30838P 19961115 (60)
US 1997-47855P 19970529 (60)
DT Utility
FS APPLICATION
LREP KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2052
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for large scale **purification** of neurotrophins, including mature **NGF**, suitable for clinical use. The methods provide means to separate neurotrophins from various less desirable misprocessed, misfolded, size, glycosylated, or charge forms. Compositions of neurotrophins, including mature **NGF**, substantially free of these variants are also provided.

L4 ANSWER 8 OF 15 USPATFULL on STN
AN 2002:8481 USPATFULL
TI CONTROLLED RELEASE MICROENCAPSULATED **NGF** FORMULATION
IN CLELAND, JEFFREY L., SAN CARLOS, CA, UNITED STATES
LAM, XANTHE M., SAN FRANCISCO, CA, UNITED STATES
DUENAS, EILEEN T., SAN JOSE, CA, UNITED STATES
PI US 2002004481 A1 20020110
US 6663899 B2 20031216
AI US 1998-95911 A1 19980611 (9)
PRAI US 1997-49541P 19970613 (60)
DT Utility
FS APPLICATION
LREP GINGER R. DREGER, KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 10 Drawing Page(s)
LN.CNT 1938
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **NGF** microencapsulation compositions having controlled release characteristics, preferably with increased stability, for the **NGF** component, particularly human recombinant **NGF** ("rhNGF") are provided that yield enhanced stability of **NGF** for use in promoting nerve cell growth, repair, survival, differentiation, maturation or function. Methods for making and using such compositions are also provided.

L4 ANSWER 9 OF 15 USPATFULL on STN
AN 2002:209328 USPATFULL
TI Semaphorin genes (I)
IN Inagaki, Shinobu, Ibaraki, JAPAN
Furuyama, Tatsuo, Ibaraki, JAPAN
PA Sumitomo Pharmaceuticals Company, Limited, Osaka, JAPAN (non-U.S. corporation)
PI US 6436669 B1 20020820
WO 9822504 19980528

AI US 1999-308179 19990514 (9)
WO 1997-JP4111 19971112
19990514 PCT 371 date
PRAI JP 1996-321068 19961115
DT Utility
FS GRANTED
EXNAM Primary Examiner: Clark, Deborah J. R.; Assistant Examiner: Chen, Shin-Lin
LREP Birch, Stewart, Kolasch & Birch, LLP
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1272
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a novel Semaphorin having neurite-outgrowth inhibition activity or proteins analogous thereto, peptide fragments of, or antibodies against, such proteins, genes encoding such proteins, expression vectors for said genes, transformed cells into which said expression vectors have been introduced, methods for producing a recombinant protein which employ said transformed cells, antisense nucleotides against the above genes, transgenic animals involving insertion or deletion of the above genes, and screening methods for antagonists of the above proteins, all of which are useful mainly in diagnoses, treatments, or studies relating to neurological diseases. The present invention further provides use of such proteins, peptides, antibodies, genes, or antisense nucleotides as pharmaceutical or diagnostic agents or laboratory reagents.

L4 ANSWER 10 OF 15 USPATFULL on STN
AN 2002:181791 USPATFULL
TI **Isolation** of neurotrophins from a mixture containing other proteins and **neurotrophin** variants using hydrophobic interaction chromatography
IN Burton, Louis E., San Mateo, CA, United States
Schmelzer, Charles H., Burlingame, CA, United States
Beck, Joanne T., Westlake Village, CA, United States
PA Genentech, Inc., So. San Francisco, CA, United States (U.S. corporation)
PI US 6423831 B1 20020723
AI US 2000-675503 20000929 (9)
RLI Continuation of Ser. No. US 1999-363573, filed on 29 Jul 1999, now patented, Pat. No. US 6184360 Continuation of Ser. No. US 1997-970865, filed on 14 Nov 1997, now patented, Pat. No. US 6005081
PRAI US 1997-47855P 19970529 (60)
US 1996-30838P 19961115 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed, Abdel A.
LREP Knobbe, Martens, Olson & Bear, LLP
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2348
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for large scale **purification** of neurotrophins, including mature **NGF**, suitable for clinical use. The methods provide means to separate neurotrophins from various less desirable misprocessed, misfolded, size, glycosylated, or charge forms. Compositions of neurotrophins, including mature **NGF**, substantially free of these variants are also provided.

L4 ANSWER 11 OF 15 USPATFULL on STN
AN 2001:18606 USPATFULL
TI **Purification** of **NGF**
IN Burton, Louis E., San Mateo, CA, United States

Schmelzer, Charles H., Burlingame, CA, United States
Beck, Joanne T., Westlake Village, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 6184360 B1 20010206
AI US 1999-363573 19990729 (9)
RLI Continuation of Ser. No. US 1997-970865, filed on 14 Nov 1997, now patented, Pat. No. US 6005081
PRAI US 1996-30838P 19961115 (60)
US 1997-47855P 19970529 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed, Abdel A.
LREP Knobbe, Martens, Olson & Bear, LLP
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2226
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for large scale **purification** of neurotrophins, including mature **NGF**, suitable for clinical use. The methods provide means to separate neurotrophins from various less desirable misprocessed, misfolded, size, glycosylated, or charge forms. Compositions of neurotrophins, including mature **NGF**, substantially free of these variants are also provided.

L4 ANSWER 12 OF 15 USPATFULL on STN
AN 2000:117328 USPATFULL
TI Controlled release microencapsulated **NGF** formulation
IN Cleland, Jeffrey L., San Carlos, CA, United States
Lam, Xanthe M., San Francisco, CA, United States
Duenas, Eileen T., San Jose, CA, United States
PA Genentech, Inc., So. San Francisco, CA, United States (U.S. corporation)
PI US 6113947 20000905
AI US 1997-874647 19970613 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Page, Thurman K.; Assistant Examiner: Channavajjala, Lakshmi
LREP Knobbe, Martens, Olson & Bear, LLP
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **NGF** microencapsulation compositions having controlled release characteristics, preferably with increased stability, for the **NGF** component, particularly human recombinant **NGF** ("rhNGF") are provided that yield enhanced stability of **NGF** for use in promoting nerve cell growth, repair, survival, differentiation, maturation or function. Methods for making and using such compositions are also provided.

L4 ANSWER 13 OF 15 USPATFULL on STN
AN 1999:167121 USPATFULL
TI **Purification** of recombinant human neurotrophins
IN Burton, Louis E., San Mateo, CA, United States
Schmelzer, Charles H., Burlingame, CA, United States
Beck, Joanne T., Westlake Village, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 6005081 19991221
AI US 1997-970865 19971114 (8)
PRAI US 1996-30838P 19961115 (60)

US 1997-47855P 19970529 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Tsang, Cecilia J.; Assistant Examiner: Mohamed, Abdel A.
LREP Torchia, Timothy E.
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2397
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods are provided for large scale **purification** of neurotrophins, including mature **NGF**, suitable for clinical use. The methods provide means to separate neurotrophins from various less desirable misprocessed, misfolded, size, glycosylated, or charge forms. Compositions of neurotrophins, including mature **NGF**, substantially free of these variants are also provided.

L4 ANSWER 14 OF 15 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
DUPLICATE 1
AN 1998-08022 BIOTECHDS
TI **Isolation** of neurotrophins from e.g. misfolded or glycosylated variants;
neurotrophin e.g. **nerve growth factor**, **neurotrophin**-3, **neurotrophin**-4/5 **purification** from bacterium fermentation broth or mammal cell culture
AU Burton L E; Schmelzer C H; Beck J T
PA Genentech
LO South San Francisco, CA, USA.
PI WO 9821234 22 May 1998
AI WO 1997-US21068 14 Nov 1997
PRAI US 1997-47855 29 May 1997; US 1996-30838 15 Nov 1996
DT Patent
LA English
OS WPI: 1998-322333 [28]
AB A new method for **isolation** of **neurotrophin** (**NT**) from a mixture which also contains other proteins involves separating the **NT** using a hydrophobic interaction chromatography resin (HICR). The mixture preferably contains a misfolded **NT** variant, an incorrectly proteolytically processed variant, or a glycoprotein variant of **NT.** Also claimed are: methods for separation of **NT** from a **chemical variant** of **NT** using high performance cation-exchange chromatography; **isolation** of **NT** from a mixture of proteins using a silica gel resin; and a composition containing a carrier and a pure **NT.** The **NT** may be **prepared** from bacterium culture and refolded in vitro prior to using HICR, or may be **isolated** from mammal cell culture. The methods are especially useful for **purification** of NTs in the **nerve growth factor** (**NGF**) superfamily, e.g. **NGF**, **neurotrophin**-4/5 or **neurotrophin**-3, for clinical use. In an example, recombinant CHO cells were transfected with a vector containing a human **NGF**-encoding DNA sequence. The cells were cultured and the culture medium was harvested and **NGF** was **purified.** (49pp)

L4 ANSWER 15 OF 15 MEDLINE on STN
AN 1999018030 MEDLINE
DN PubMed ID: 9799803
TI Bovine aortic endothelial cells express a variant of the very low density lipoprotein receptor that lacks the O-linked sugar domain.
AU Magrane J; Reina M; Pagan R; Luna A; Casaroli-Marano R P; Angelin B; Gafvels M; Vilaro S
CS Department of Cellular Biology, Faculty of Biology, University of

Barcelona, Avda. Diagonal, 645, E-08028 Barcelona, Spain.
SO Journal of lipid research, (1998 Nov) 39 (11) 2172-81.
Journal code: 0376606. ISSN: 0022-2275.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AF016537; GENBANK-AF034420
EM 199812
ED Entered STN: 19990115
Last Updated on STN: 19990115
Entered Medline: 19981222
AB The very low density lipoprotein (VLDL) receptor is a member of the low density lipoprotein supergene family of receptors in which differential splicing of mRNA has been reported. We present several lines of evidence showing that bovine aortic endothelial cells exclusively express a VLDL receptor isoform that lacks the O-linked sugar domain i) Western and receptor-associated protein (RAP) ligand blotting gave a single band of about 99 kDa in membrane extracts of bovine aortic endothelial cells (BAEC). ii) Screening of the BAEC cDNA library with the previously characterized human VLDL receptor cDNA as a probe gave several C-terminal-positive clones; all lacked the 84 nucleotides corresponding to exon 16. Polymerase chain reaction (PCR) confirmed that VLDL receptor cDNA encoding exon 16 was absent from the library. iii) Reverse transcription (RT)-PCR analysis of the BAEC mRNA using a pair of oligonucleotide primers that flank the deletion gave only one band of 136 **nt.** iv) Semiquantitative RT-PCR analysis showed that only the non-O-**glycosylated variant** was expressed in BAEC.
Cell-binding studies with antibodies against the N-terminal domain showed that the BAEC VLDL receptor is present at the plasma membrane, suggesting that the non-**glycosylated variant** could be functional.
In addition, RT-PCR performed in bovine tissues showed that the variant containing the O-linked sugar domain is preferentially expressed in heart, brain, and skeletal muscle, whereas the non-O-glycosylated spliced variant is found in all tissues analyzed. Taken together these results suggest that the differential splicing of the VLDL receptor is cell- and tissue-specific and that the functions of the receptor could depend on the cell type.

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 17:57:55 ON 11 JUL 2004